

Bottesini Silk Strings Research

Silk Strings Research:

As part of my research into Bottesini, one of the commonly discussed topics is whether Bottesini used silk strings. In Bottesini's Method, he speaks briefly about his preference for a 'plain string' and not one that is metal wrapped or covered, but he unfortunately does not mention exactly what a 'plain string' is made from. Rodney Slatford states in one of his books that Bottesini used silk strings (Rodney Slatford, Editor's Note, Giovanni Bottesini Concerto no. 2 in A minor for Double Bass and Piano, Yorke Edition 1982) and it has been mentioned to me by a couple of other people I know. I thought it would be useful to try and find some more information myself and to see if it might actually work from first hand experience. In photos of Bottesini it is very hard to tell exactly what the strings are made of as the photos are either too far away or aren't crisp enough to see detail. It is quoted in London newspapers at the time, that Bottesini's strings are much thinner than usual and suggesting (to me at least) his strings could have been made of a different material that would be far more suitable to play harmonic passages on, a common feature of his compositions. If his strings were gut it would suggest they were made thinner by the extra tension created from tuning the bass up a tone or minor 3rd than their standard orchestral tuning. The other suggestion is that they could have been produced from a different animal than was used normally in other countries; I have once read a suggestion of catgut.

My findings:

So what have I found from the silk strings I have tried? It is very important that I mention at this point that these strings are the first experiment. Bottesini's strings could potentially have been manufactured in a different way, producing different results, but it does give us some idea. These strings have been made by repeatedly twisting together lengths of silk to make one strand that in turn have been twisted together with other strands with a final wrapping over the top. As you probably can hear by the examples, they have a very similar attack and sound to gut, but the strings in my videos have a tension less than gut so cannot project as much or respond quickly to repeated notes. This could explain why some of Bottesini's compositions were up a minor third from normal orchestral tuning as he was trying to get extra tension in his strings for projection. The tension drops rapidly as the strings get deeper or thicker so it seems to me, unless these could be produced with greater tension it could have only been used on the 1st string sensibly. Harmonics are brighter than on gut, but very difficult to produce. With the tension being so low, in some ways it is easier to produce a note by pushing the string to the side rather than using a harmonic in the very high positions. In low positions however the string does feel nice to touch as it is so easily pressed down, but still hard to make speak.

Conclusion:

There still is a chance that Bottesini used silk strings as these are my first attempt at trying bass strings with this material, however I am less confident than I was before. Further research is needed to see if it is possible to produce the strings in a different

fashion that would allow me to bring more tension into the string and thus more playable. Another possibility to consider would be that Bottesini perhaps used them in combination with gut, the 1st string silk and the lower two gut, as this way the tension would have been more uniform. This would be very hard to distinguish in a photo once the string had discoloured a bit from use. It is also possible to consider that Bottesini perhaps experimented with them for part of his career and not all of it, switching around different combinations. He was open to trialing different equipment for the bass, having had various bows made for him at different lengths and different hair colours until he found a setup that worked for him. It is also important to consider 'the silk road' which brought many Chinese silk products to northern Italy over the years. I would like to try and find some concrete evidence for myself that Bottesini did use silk strings as this would give more validation to my research, however I have not been able to find the source that Rodney Slatford has quoted from and would be very pleased to have the opportunity to have a discussion about it.

It has occurred to me that perhaps the use of silk strings might have been a miss understanding or a miss-quoting. I did wonder whether it could have been someone describing how he played, 'in a smooth silky fashion along the strings' or something of a similar idea, however to date the only evidence I have found discussing his strings are a couple of sentences in articles from British newspapers or what he mentions in his method book. I welcome anyone that has any other information that could help develop this project further and give some closure to the question.

Looking forward however, I do wonder whether this is something worth looking into for the future and developing, to produce a more sustainable string that can be more easily recycled and produced with a lower carbon impact. Would there be a way to make this work with a mix of fibres or resins to make this string perform better. More development and research would be needed to see if this is possible.

In summary it has been a fascinating little exploration into this unsolved question. The strings played very differently to how I imagined them to and I would be interested to see if there is any way to improve them by making them a different way. I would love to hear from anyone that has any more information and similarly if anyone would like to chat about what I have found, then please drop me a line, I would more than happily tell you what I found over a pint when we can ☺

Stephen Street 2020